

ABSTRACT OF THE DISCLOSURE

An apparatus and method to make debugging of cyclically executed control programs more convenient in a control system. To this end, the control program is compiled into a microprocessor-independent intermediate code. This intermediate code is loaded into the runtime system RS and is compiled there into the microprocessor code. Area details about code areas needing to be examined are stored in a dedicated data storage unit and are mapped onto areas of machine code using debug functionality in the engineering system and in the runtime system.